Remarks

This is a complete response to the Office Action of June 30, 2005.

Claims 1-20 were in this case as filed. Claims 8-14 were rejected under 35 U.S.C. 112, second paragraph, and claims 1, 2, 8, 9, and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Dwight.

Claims 3-7 and 16-20 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. These claims 3-7 and 16-20 have been so rewritten and are allowable.

Claims 10-14 also have been rewritten in independent form including all the limitations of the base claim 8 (that has been rewritten as discussed below to avoid a rejection under 35 U.S.C. 112, 2nd para.) and intervening claim 9, and are also allowable.

Rejection of Claims 8-14 Under 35 U.S.C. 112, second para.

Claims 8-14 have been rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The second paragraph of part 1 on page 2 of the Office Action said that claim 8 is indefinite because it was not clear

how the "tandem drive system" would be disposed inside within the main loop, and since the components of the "tandem drive system" have not been defined, the claim is indefinite as to how the "system" would engage the main drive sprocket.

Claim 8 has been amended to recite:

> ". . . a main track longitudinally extending in a closed endless main loop on each of said opposite sides, each main track engaging a separate main drive sprocket assembly, extending to a separate main drive idler wheel, under said roadwheels, and back to said separate rear-mounted main drive-sprocket assembly in said main loop **each main track having an inboard face on an inward facing inner surface**;
>
> a tandem drive system **having a secondary track** inside said main loop of each main track, **each secondary track of said tandem drive system engaging a separate rear-mounted main drive-sprocket assembly, extending forward along the tracked vehicle from each main drive-sprocket assembly under said roadwheels,** and defining a closed endless secondary loop inside of and shorter than said main loop, **and each secondary track being adjacent to and laterally extending across the inboard face of a separate main track where the main and secondary tracks are wrapped around each main drive-sprocket assembly"** (emphasis added).

The emphasized amended portions of claim 8 particularly point out and distinctly claim a secondary track of the tandem drive system disposed inside the main loop of each main track. Each secondary track engages a rear-mounted main drive-sprocket assembly, extends forward along the tracked vehicle from each main drive-sprocket assembly under only an aft-most fractional portion of the roadwheels, and defines a closed endless secondary loop inside of and shorter than the main loop. Claim 8 as amended

also clearly sets forth the adjacent, laterally extending relationship of each secondary track with respect to the inboard face of a separate main track.

Contrary to the comments of the second paragraph of part 1 of the Office Action, the subject matter of claim 8 does recite how each defined secondary track of the tandem drive system would be disposed within the main loop and how each secondary track of the tandem drive system would engage the main drive sprocket.

Therefore, claim 8 does in fact particularly point out and distinctly claim the invention and the 35 U.S.C. 112 ground of rejection of claim 8 no longer applies.

Rejection of Claims 1, 2, 8, 9 and 15 Under 35 U.S.C. 103(a) as Unpatentable Over Dwight

A. This rejection does not apply to resubmitted claims 1, 2, 8, 9, and 15 since the teachings or suggestions in Dwight do not substantiate a prima facie case of obviousness of the subject matter of these claims.

B. Dwight discloses a drive for track laying vehicles that has a band track 14 made up primarily of a pair of spaced-apart bands 22,23 having embedded cross bars 28 that are connected to laterally extending sheet metal shoes 27. A pair of belts 32, 33 having a hexagonal cross-sectional shape engage V-notched belt engaging members 45, 46 that are secured to track 14 at regular

intervals. The hexagonal belts 32,33 only deliver propulsive power to track 14 to drive it and secondarily function to cushion and guide track 14 as it is driven via drive wheel 10. Lines 24-29 of column 2 of Dwight says:

> This arrangement is such that the drive wheel (10) drives the belts (32, 33) which in turn engage and drive the track (14), while at the same time quiet guiding of the track (14) is provided by the belts which cause the lugs 30 to normally clear the guide grooves 21.

C. Tension members 51 in hexagonal belts 32, 33 provide strength to drive track 14 and a body of soft rubber 50 in hexagonal belts 32, 33 provides quiet guiding of track 14. Nothing in Dwight teaches or suggests that hexagonal belts 32, 33 were ever intended to act as a secondary drive track to support and propel tractors or other vehicles. Nothing in Dwight teaches or suggests that such a use for hexagonal belts 32, 33 was ever contemplated.

D. Contrary to the teachings and suggestions of Dwight and the erroneous conclusion in part 4 on page 3 of the Office Action that the claims 1, 2, 8, 9 and 15 are unpatentable over Dwight, the claimed invention patentably distinguishes over the teachings and suggestions of Dwight by being drawn to an operable and survivable apparatus having secondary tracks for recovering a tracked vehicle if either of the main tracks become separated or otherwise disabled.

E. Dwight is defective in teachings and suggestions to sustain a rejection based on obviousness of claim 1, which provides:

> A tandem drive system for a tracked vehicle having a **main track** longitudinally extending in a closed endless main loop on opposite sides and **engaging a separate main drive sprocket assembly**, extending under roadwheels to a main drive idler wheel, and back to said main drive-sprocket assembly in said main loop, **each main track having an inboard face on an inward facing inner surface** said tandem drive system comprising:
>
> a **secondary track engaging each main drive-sprocket assembly and extending forward along the tracked vehicle from each main drive-sprocket assembly under only an aft-most fractional portion of the roadwheels**, each secondary track being configured as a closed endless secondary loop inside of said main loop of each main track, and **each secondary track being adjacent to and laterally extending across the inboard face of a separate main track where said main and secondary tracks are wrapped around each main drive-sprocket assembly** (emphasis added).

Nor does Dwight teach or suggest the combination recited in claim 8:

> A tracked vehicle comprising:
>
> a main return idler wheel on opposite sides and at the front of a tracked vehicle;
>
> a main drive sprocket assembly on each of said opposite sides mounted at the rear of said tracked vehicle;
>
> roadwheels on each of said opposite sides, said roadwheels being spaced apart from one another and located along the bottom of said tracked vehicle;
>
> **a main track** longitudinally extending in a closed endless main loop on each of said opposite sides, each **main track engaging a separate main drive sprocket assembly**, extending to a separate main drive idler wheel, under said roadwheels, and back to said separate rear-mounted main drive-sprocket assembly in said main

loop **each main track having an inboard face on an inward facing inner surface;**

a tandem drive system having **a secondary track inside said main loop of each main track, each secondary track of said tandem drive system engaging a separate rear-mounted main drive-sprocket assembly,** extending forward along the tracked vehicle from each main drive-sprocket assembly under said roadwheels, and defining a closed endless secondary loop inside of and shorter than said main loop, and **each secondary track being adjacent to and laterally extending across the inboard face of a separate main track where the main and secondary tracks are wrapped around each main drive-sprocket assembly** (emphasis added).

Also, Dwight fails to teach or suggest the method recited in claim 15:

A method of creating a tandem drive system for a tracked vehicle having a **main track** longitudinally extending in a closed endless main loop on opposite sides and **engaging a separate main drive sprocket assembly,** extending under roadwheels to a main drive idler wheel, and returning back to said main drive-sprocket assembly in said main loop, **each main track having an inboard face on an inward facing inner surface,** said method comprising the steps of:

engaging a secondary track by each main drive-sprocket assembly;

extending said secondary track forward along the track vehicle from each main drive-sprocket assembly under only an aft-most fractional portion of the roadwheels; and

configuring said secondary track as a closed endless secondary loop inside of and shorter than said main closed endless loop of each main track, **each secondary track being adjacent to and laterally extending across the inboard face of a separate main track where said main and secondary tracks are wrapped around each main drive-sprocket assembly.**

as recited in claim 15.

F. Dwight does not show, teach, or suggest to make obvious the claimed invention of parent claims 1, 8, and 15 taken as a whole including **1.) a main track longitudinally extending in a closed endless main loop on each of opposite sides,** to **engage a separate main drive sprocket assembly,** and **each main track having an inboard face on an inward facing inner surface, 2.) a secondary track inside the main loop of each main track, each secondary track of the tandem drive system engaging a separate rear-mounted main drive-sprocket assembly,** and **3.) each secondary track being adjacent to and laterally extending across the inboard face of a separate main track where the main and secondary tracks are wrapped around each main drive-sprocket assembly.**

G. The Office Action disregarded that the invention taken as a whole assures recovery of a tracked vehicle by secondary tracks if either of the main tracks separate, whereas Dwight has no such awareness or capability for doing so. To that end the claimed invention of claims 1, 8, and 15 have recitations that call for each of the main tracks engaging a separate drive sprocket assembly and the each of the secondary tracks engaging a separate one of the drive sprocket assemblies. Contrary to the claimed invention, Dwight only teaches and suggests that hexagonal bands 32, 33

engage the drive wheel and that track 14 is cushioned and driven by hexagonal bands 32, 33.

H. Either the main or secondary tracks of the claimed invention can support and maneuver a tracked vehicle. As shown in FIG. 5 of the drawings and described in lines 1 through 5 of page 10 and lines 18 through 21 of page 11, the claimed secondary track is adjacent to and laterally extending across the inboard face of a separate main track where the main and secondary tracks are wrapped around each main drive-sprocket assembly. In comparison, hexagonal bands 32, 33 of Dwight cannot support, nor give reliable traction for the load of tractors nor were they ever intended to be so used. The separated hexagonal bands 32, 33 as taught and suggested by Dwight must have additional support structure to retrieve a tracked vehicle that has had one of its main tracks separated; however, nothing in Dwight teaches or suggests this capability or the unique subject matter of the claimed invention.

I. Contrary to the comments of the third and fourth paragraphs of part 4 of the Office Action, the subject matter of claims 8 and 15 is not obvious because of the inadequacies of the structural teachings and suggestions of Dwight as set out above.

J. The claimed invention of claims 1, 8, and 15 set forth an operative system, vehicle, and method capable of

reliably operating in harsh environments such as those found on the battlefield. This allows recovery, repair, and further use of an otherwise disabled vehicle. There is no proper basis for concluding that the claimed subject matter of claims 1, 8 and 15 and their dependent claims 2, and 9 are obvious under 35 U.S.C. 103(a).

THE TEACHINGS AND SUGGESTIONS OF DWIGHT DO NOT MAKE OBVIOUS THE SUBJECT MATTER OF CLAIMS 1, 2, 8,9, AND 15.

Claims 1-20 define a patentably significant advance in the state of the art in definite form and free of the art, and are allowable.

Accordingly, an early Notice of Allowance is earnestly solicited.

Respectfully submitted,

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